CLAIMS

What is claimed is:

1.   A method for determining areas of sub-pixel regions formed by edges in a pixel, comprising:

receiving a first fill style to a first side of an edge, a second fill style to a second side of the edge, and a projected area of the edge to the second side of the edge;

determining if there is a first sub-pixel region in a cell for the pixel having the first fill style;

if there is a first sub-pixel region in the cell having the first fill style:

incrementing a first area of the first sub-pixel region by the difference between one unit area of one pixel and the projected area;

modularizing the first area by one unit area;

if there is not a first sub-pixel region in the cell having the first fill style, saving in the cell a second sub-pixel region having (1) the first fill style and (2) a second area equal to a difference between one unit area and the projected area.

2.   The method of claim 1, further comprising:

determining if there is a third sub-pixel region in the cell having the second fill style;

if there is a third sub-pixel region in the cell having the second fill style:

incrementing a third area of the third sub-pixel region by the projected area;

modularizing the fourth area by one unit area;

if there is not a third sub-pixel region in the cell having the second fill style,
saving in the cell a fourth sub-pixel region having (1) the second fill style and (2)
a fourth area equal to the projected area.

3.   The method of claim 2, further comprising, prior to said determining if there is a first
sub-pixel in the cell having the first fill style and said determining if there is a third sub-pixel in
the cell having the second fill style:

determining if the cell is empty;

if the cell is empty:

saving in the cell the second sub-pixel region having (1) the first fill style
and (2) the second area equal to the difference between one unit area and
the projected area;

saving in the cell the fourth sub-pixel region having (1) the second fill
style and (2) the fourth area equal to the projected area.

4.   A method for determining areas of sub-pixel regions formed by edges in a pixel,
comprising:

receiving a first fill style to a first side of an edge, a second fill style to a second
side of the edge, and a projected area of the edge to the second side of the edge;

determining if a cell for the pixel is empty;

if the cell is empty:

saving in the cell a first sub-pixel region having (1) the first fill style and
(2) a first area equal to a difference between one unit area of one pixel and
the projected area;

saving in the cell a second sub-pixel region having (1) the second fill style
and (2) a second area equal to the projected area;

if the cell is not empty:

> determining if there is a third sub-pixel region in the cell having the first fill style;

> if there is a third sub-pixel region in the cell having the first fill style:

>> incrementing a third area of the third sub-pixel region by the difference between one unit area and the projected area;

>> modularizing the third area by one unit area;

> if there is not a third sub-pixel region in the cell having the first fill style, saving in the cell the first sub-pixel region having (1) the first fill style and (2) the first area equal to the difference between one unit area and the projected area.

> determining if there is a fourth sub-pixel region in the cell having the second fill style;

> if there is a fourth sub-pixel region in the cell having the second fill style:

>> incrementing a fourth area of the fourth sub-pixel region by the projected area;

>> modularizing the fourth area by one unit area;

> if there is not a fourth sub-pixel region in the cell having the second fill style, saving in the cell the second sub-pixel region having (1) the second fill style and (2) the second area equal to the projected area.